

SEQUENCE LISTING

(1) GENERAL INFORMATION:

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(i) APPLICANT:

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- (A) NAME: Dr.Rentschler Biotechnologie GmbH
- (B) STREET: Erwin-Rentschler-Str. 21
- (C) TOWN: Laupheim
- (E) COUNTRY: Germany
- (F) POSTCODE: D-88471

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(ii) TITLE OF THE INVENTION: Liquid interferon- β
formulations

(iii) NUMBER OF SEQUENCES: 14

(iv) COMPUTER-READABLE VERSION:

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- (A) MEDIUM TYPE: Floppy disk
- (B) COMPUTER: IBM/PC compatible
- (C) OPERATING SYSTEM: PC-DOS/MS-DOS
- (D) SOFTWARE: Patent In Release #1.0, Version
#1.30 (EPA)

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(2) INFORMATION FOR SEQ ID NO: 1:

(i) SEQUENCE CHARACTERISTICS:

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- (A) LENGTH: 7 aminoacids
- (B) TYPE: aminoacid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

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(viii) POSITION IN THE GENOME:

(B) MAP POSITION: 109-115

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:

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Glu Asp Phe Thr Arg Gly Lys
1 5

(2) INFORMATION FOR SEQ ID NO: 2:

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(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 6 aminoacids
- (B) TYPE: aminoacid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(viii) POSITION IN THE GENOME:

5 (B) MAP POSITION: 100-105

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:

Thr Val Leu Glu Glu Lys
1 5

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(2) INFORMATION FOR SEQ ID NO: 3:

(i) SEQUENCE CHARACTERISTICS:

15 (A) LENGTH: 7 aminoacids
(B) TYPE: aminoacid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

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(viii) POSITION IN THE GENOME:

(B) MAP POSITION: 46-52

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:

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Gln Leu Gln Gln Phe Gln Lys
1 5

(2) INFORMATION FOR SEQ ID NO: 4:

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(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 8 aminoacids
(B) TYPE: aminoacid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

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(ii) MOLECULE TYPE: peptide

(viii) POSITION IN THE GENOME:

(B) MAP POSITION: 116-123

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(ix) FEATURE:

(A) NAME/KEY: Modified-site
(B) POSITION: 2
(C) OTHER INFORMATION: /product= "Xaa =
45 Met(oxidized)"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:

Leu Xaa Ser Ser Leu His Leu Lys
1 5

5 (2) INFORMATION FOR SEQ ID NO: 5:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 8 aminoacids
(B) TYPE: aminoacid
10 (C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

15 (viii) POSITION IN THE GENOME:

(B) MAP POSITION: 116-123

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:

Leu Met Ser Ser Leu His Leu Lys
1 5

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(2) INFORMATION FOR SEQ ID NO: 6:

(i) SEQUENCE CHARACTERISTICS:

- 25 (A) LENGTH: 12 aminoacids
(B) TYPE: aminoacid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

30 (ii) MOLECULE TYPE: peptide

(viii) POSITION IN THE GENOME:

(B) MAP POSITION: 34-45

35 (ix) FEATURE:

- (A) NAME/KEY: Modified-site
(B) POSITION: 3
(C) OTHER INFORMATION: /product= "Xaa =
Met(oxidized)"

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 6:

Asp Arg Xaa Asn Phe Asp Ile Pro Glu Glu Ile Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO: 7:

(i) SEQUENCE CHARACTERISTICS:

- 5 (A) LENGTH: 11 aminoacids
(B) TYPE: aminoacid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

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(viii) POSITION IN THE GENOME:

(B) MAP POSITION: 124-134

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 7:

15 **Arg Tyr Tyr Gly Arg Ile Leu His Tyr Leu Lys**
1 5 10

(2) INFORMATION FOR SEQ ID NO: 8:

(i) SEQUENCE CHARACTERISTICS:

- 20 (A) LENGTH: 12 aminoacids
(B) TYPE: aminoacid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

25 (ii) MOLECULE TYPE: peptide

(viii) POSITION IN THE GENOME:

(B) MAP POSITION: 34-45

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 8:

Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO: 9:

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(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 aminoacids
(B) TYPE: aminoacid
(C) STRANDEDNESS: single
40 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(viii) POSITION IN THE GENOME:

45 (B) MAP POSITION: 20-33

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 9:

Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO: 10:

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(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 19 aminoacids

(B) TYPE: aminoacid

(C) STRANDEDNESS: single

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(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(viii) POSITION IN THE GENOME:

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(B) MAP POSITION: 1-19

(ix) FEATURE:

(A) NAME/KEY: Modified-site

(B) POSITION: 1

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(C) OTHER INFORMATION: //product= "Xaa =
Met(oxidized)"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 10:

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Xaa Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln
1 5 10 15

Cys Gln Lys

(2) INFORMATION FOR SEQ ID NO: 11:

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(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 19 aminoacids

(B) TYPE: aminoacid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

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(ii) MOLECULE TYPE: peptide

(viii) POSITION IN THE GENOME:

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(B) MAP POSITION: 1-19

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 11:

Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln
1 5 10 15

Cys Gln Lys

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(2) INFORMATION FOR SEQ ID NO: 12:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 30 aminoacids
- (B) TYPE: aminoacid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(viii) POSITION IN THE GENOME:

- (B) MAP POSITION: 137-166

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 12:

Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr	Ile	Val	Arg	Val	Glu	Ile	Leu	Arg
1				5					10					15	
Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu	Thr	Gly	Tyr	Leu	Arg	Asn		
			20					25					30		

(2) INFORMATION FOR SEQ ID NO: 13:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 47 aminoacids
- (B) TYPE: aminoacid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(viii) POSITION IN THE GENOME:

- (B) MAP POSITION: 53-99

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) POSITION: 10
- (C) OTHER INFORMATION: /product= "Xaa = Met(oxidized)"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 13:

Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Xaa	Leu	Gln	Asn	Ile	Phe	Ala
1				5					10					15	
Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn	Glu	Thr	Ile	Val
			20					25					30		
Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn	His	Leu	Lys	
			35				40					45			

(2) INFORMATION FOR SEQ ID NO: 14:

(i) SEQUENCE CHARACTERISTICS:

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- (A) LENGTH: 47 aminoacids
- (B) TYPE: aminoacid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

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(viii) POSITION IN THE GENOME:

- (B) MAP POSITION: 53-99

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 14:

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Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln Asn Ile Phe Ala
1 5 10 15
Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn Glu Thr Ile Val
20 25 30
Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn His Leu Lys
35 40 45